The following statistics of the total mean monthly rainfall for a few stations near the line of totality may be of some slight moment in determining the relative value of the various places named. No really definite conclusions can be drawn from these, however, for two reasons, *first*, because the rainfall from year to year varies enormously, and *second*, because the rainfall at stations only a little distance from those named in the table may differ largely from the precipitation there set down on account of local topographical reasons.

[*From the Report of the State Engineer on Physical Data of California* (1886).]

Monthly Means of Rain and Melted Snow.

Stations.	Years.	Annual Rainfall. Inches.	Rainfall, December. Inches.	Rainfall, January. Inches.
Butte County:				
Cherokee	1871–84	43·9	6·08	8·37
Cherokee Reservoir ...	1873–79	60·3	5·77	13·35
Chico	1870–84	20·3	3·55	4·23
Oroville	1880–82	18·9	7·64	4·58
Colusa County:				
Colusa	1871–84	17·2	3·25	3·73
Orland	1882–84	14·7	0·47	1·95
Princeton	1873–84	14·9	2·18	3·24
Williams	1876–84	12·2	1·69	2·83
Willows	1878–84	11·5	2·31	2·09
Lake County:				
Kono Tyee, near Lakeport	1873–84	21·3	2·26	5·13
Middletown	1879–84	41·9	8·67	7·66
Mendocino County:				
Punta Arenas	1875–84	30·5	3·71	6·46
Ukiah	1876–84	32·5	4·69	7·07

Note on Mars. By Richard A. Proctor.

Mars should be carefully observed in June and July for duplication of the "canals" as Martian autumn is approached. Regarding these curious double dark streaks (or rather the bright streaks between them and the fainter streaks on either side of them), as the diffraction-images of Martian rivers at times when mist hangs over the river-beds, as I suggested four years since in the *Newcastle Weekly Chronicle*, we may expect the phenomena to be as noticeable when Martian autumn is approach-

ing as after Martian spring has begun (the reference is to the northern hemisphere, to which the double canals chiefly belong).

I suppose no one regards the double canals as objective realities; but, on the other hand, no one can regard them as optical *illusions*. Regarding them as phenomena of diffraction—that is, as optical *products*—we find an explanation at once of their variable appearance (since when the rivers look dark, as they usually must, on a light ground the duplication would not be observed), of their synchronising with the seasons, and of their being visible only with telescopes between certain limits of aperture. This last consideration suggests an effective method by which this diffraction theory can be put to the test.

It would be well if the appearances seen by Schiaparelli could be seen and delineated by observers possessing the power of delineating them with some degree of artistic skill. No one who has ever seen *Mars* through a good telescope can accept the hard and unnatural configurations depicted by Schiaparelli. The drawings of Dawes, Burton, Knobel, Denning, and Green are far more satisfactory, though some minute details seen by Schiaparelli may not have been within the telescopic range of these careful observers.

It is, I imagine, hopeless to expect that the most powerful of the telescopes constructed within the last quarter of a century will be applied to any work so thoroughly within their power as the examination of the planets' discs for features detected or suspected under the scrutiny of weaker telescopes. It seems to be thought so much more satisfactory to apply these splendid instruments to work which smaller telescopes cannot attempt, that micrometrical observations of the satellites of *Mars*, of *Hyperion*, or of exceedingly minute double stars, must be supposed to add amazingly to our knowledge of the universe, since the large telescopes are so diligently turned on such work, and so carefully kept from entering on work which has already been begun by smaller instruments. Unfortunately all the more important lines of research have been opened with telescopes of comparatively inferior power; so that if the dignity of the larger instruments requires that they shall be used only on lines of work which they and they only can open, we must fear that their work will rather be unique than specially interesting.

Corona Lodge, Orange Lake, Fla.:
1888, *March* 31.

Observations of Comet a, 1888 (Sawerthal), made at the Royal Observatory, Greenwich.

(*Communicated by the Astronomer Royal.*)

The observations were made with the East or Sheepshanks Equatorial, aperture 6·7 inches, by taking transits over two cross wires at right angles to each other, and each inclined 45° to the parallel of declination.

Comet a, 1888 (Sawerthal).

Greenwich Mean Solar Time.	Observer.	∥−∗ R.A.	Corr. for Par. and Refraction in R.A.	∥−∗ N.P.D.	Corr. for Par. and Refraction in N.P.D.	No. of Comp.	Apparent R.A.	Apparent N.P.D.	Comp. Star.
1888 d h m s		m s	s	′ ″	″		h m s	° ′ ″	
April 6 16 15 6	H. T.	+0 55·95	−0·30	− 6 14·5	−6·4	6	22 18 27·45	81 0 7·5	*a*
6 16 19 41	,,	−0 38·73	−0·20	+14 35·4	−3·9	4	22 18 29·78	81 0 10·5	*b*

Mean Places of Comparison Stars.

	Star's Name.	R.A., 1888·0.	N.P.D., 1888·0.	Authority.
		h m s	° ′ ″	
a	Lalande 43672	22 17 32·74	81 6 20·4	Second Armagh Catalogue.
b	W. B. XXII. 368	22 19 9·63	80 45 30·9	Glasgow Catalogue.

The observations are corrected for parallax and refraction.
The initials H. T. are those of Mr. Turner.
The comet has been looked for on a number of other mornings, but bad weather has prevented its being seen.